

Patrick Grant

List of Publications by Year in descending order

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209
papers

7,903
citations

53794

45
h-index

62596

80
g-index

211
all docs

211
docs citations

211
times ranked

7948
citing authors

#	ARTICLE	IF	CITATIONS
1	The role of nanomaterials in redox-based supercapacitors for next generation energy storage devices. <i>Nanoscale</i> , 2011, 3, 839.	5.6	778
2	Spray forming. <i>Progress in Materials Science</i> , 1995, 39, 497-545.	32.8	329
3	A novel hybrid supercapacitor with a carbon nanotube cathode and an iron oxide/carbon nanotube composite anode. <i>Journal of Materials Chemistry</i> , 2009, 19, 8755.	6.7	278
4	Inkjet Printing of Wax-Based Alumina Suspensions. <i>Journal of the American Ceramic Society</i> , 2001, 84, 2514-2520.	3.8	207
5	An investigation of nanostructured thin film Li-MoO_3 based supercapacitor electrodes in an aqueous electrolyte. <i>Electrochimica Acta</i> , 2013, 91, 253-260.	5.2	177
6	A synchrotron X-ray radiography study of dendrite fragmentation induced by a pulsed electromagnetic field in an Al-15Cu alloy. <i>Acta Materialia</i> , 2014, 70, 228-239.	7.9	174
7	Microwave dielectric characterisation of 3D-printed $\text{BaTiO}_3/\text{ABS}$ polymer composites. <i>Scientific Reports</i> , 2016, 6, 22714.	3.3	174
8	A quantitative study of solute diffusion field effects on heterogeneous nucleation and the grain size of alloys. <i>Acta Materialia</i> , 2011, 59, 2135-2144.	7.9	166
9	Modelling of droplet dynamic and thermal histories during spray forming. I. individual droplet behaviour. <i>Acta Metallurgica Et Materialia</i> , 1993, 41, 3097-3108.	1.8	163
10	Amorphization in extreme deformation of the CrMnFeCoNi high-entropy alloy. <i>Science Advances</i> , 2021, 7, .	10.3	140
11	Isothermal grain coarsening of spray formed alloys in the semi-solid state. <i>Acta Materialia</i> , 2002, 50, 2517-2535.	7.9	135
12	3D printed anisotropic dielectric composite with meta-material features. <i>Materials and Design</i> , 2016, 93, 423-430.	7.0	130
13	A High-Speed Imaging and Modeling Study of Dendrite Fragmentation Caused by Ultrasonic Cavitation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 3755-3766.	2.2	118
14	Solidification in Spray Forming. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 1520-1529.	2.2	102
15	Printable magnetite and pyrrole treated magnetite based electrodes for supercapacitors. <i>Journal of Materials Chemistry</i> , 2010, 20, 7637.	6.7	102
16	Coral-like directional porosity lithium ion battery cathodes by ice templating. <i>Journal of Materials Chemistry A</i> , 2018, 6, 14689-14699.	10.3	101
17	Spray deposition of steam treated and functionalized single-walled and multi-walled carbon nanotube films for supercapacitors. <i>Nanotechnology</i> , 2009, 20, 065605.	2.6	93
18	Microstructural characterisation of spray formed Si-30Al for thermal management applications. <i>Scripta Materialia</i> , 2006, 55, 111-114.	5.2	92

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19	The velocity and temperature of steel droplets during electric arc spraying. <i>Surface and Coatings Technology</i> , 2005, 195, 91-101.	4.8	89
20	Modelling of droplet dynamic and thermal histories during spray forming—II. Effect of process parameters. <i>Acta Metallurgica Et Materialia</i> , 1993, 41, 3109-3118.	1.8	88
21	Fe ₃ O ₄ /carbon nanofibres with necklace architecture for enhanced electrochemical energy storage. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14245-14253.	10.3	87
22	Enhancing the supercapacitor behaviour of novel Fe ₃ O ₄ /FeOOH nanowire hybrid electrodes in aqueous electrolytes. <i>Journal of Power Sources</i> , 2015, 274, 907-915.	7.8	86
23	Nanomechanical characterization of Sn–Ag–Cu/Cu joints—Part 1: Young's modulus, hardness and deformation mechanisms as a function of temperature. <i>Acta Materialia</i> , 2013, 61, 2460-2470.	7.9	78
24	Low-tortuosity and graded lithium ion battery cathodes by ice templating. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21421-21431.	10.3	77
25	Crystal nucleation in metallic alloys using x-ray radiography and machine learning. <i>Science Advances</i> , 2018, 4, eaar4004.	10.3	74
26	2020 roadmap on solid-state batteries. <i>JPhys Energy</i> , 2020, 2, 032008.	5.3	74
27	Influence of cooling rate on the Fe intermetallic formation in an AA6063 Al alloy. <i>Journal of Alloys and Compounds</i> , 2013, 555, 274-282.	5.5	71
28	Fabrication of Composite Filaments with High Dielectric Permittivity for Fused Deposition 3D Printing. <i>Materials</i> , 2017, 10, 1218.	2.9	70
29	One-step spray processing of high power all-solid-state supercapacitors. <i>Scientific Reports</i> , 2013, 3, 2393.	3.3	69
30	The spatial and temporal distribution of dendrite fragmentation in solidifying Al-Cu alloys under different conditions. <i>Acta Materialia</i> , 2016, 121, 384-395.	7.9	69
31	Spray deposited fluoropolymer/multi-walled carbon nanotube composite films with high dielectric permittivity at low percolation threshold. <i>Carbon</i> , 2009, 47, 561-569.	10.3	68
32	Solid-state supercapacitors with rationally designed heterogeneous electrodes fabricated by large area spray processing for wearable energy storage applications. <i>Scientific Reports</i> , 2016, 6, 25684.	3.3	68
33	Production of hollow and porous Fe ₂ O ₃ from industrial mill scale and its potential for large-scale electrochemical energy storage applications. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2597-2604.	10.3	68
34	Processing and microstructure characterisation of oxide dispersion strengthened Fe–14Cr–0.4Ti–0.25Y ₂ O ₃ ferritic steels fabricated by spark plasma sintering. <i>Journal of Nuclear Materials</i> , 2015, 464, 61-68.	2.7	65
35	Ultrasonic liquid metal processing: The essential role of cavitation bubbles in controlling acoustic streaming. <i>Ultrasonics Sonochemistry</i> , 2019, 55, 243-255.	8.2	64
36	SnS/PbS nanocrystal heterojunction photovoltaics. <i>Nanotechnology</i> , 2010, 21, 185202.	2.6	61

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37	A two layer electrode structure for improved Li Ion diffusion and volumetric capacity in Li Ion batteries. <i>Nano Energy</i> , 2017, 31, 377-385.	16.0	60
38	Microstructure evolution of vacuum plasma sprayed CoNiCrAlY coatings after heat treatment and isothermal oxidation. <i>Surface and Coatings Technology</i> , 2006, 201, 2887-2896.	4.8	59
39	Oxidation during electric arc spray forming of steel. <i>Journal of Materials Processing Technology</i> , 2006, 178, 259-269.	6.3	58
40	Nanomechanical characterization of Sn-Ag-Cu/Cu joints”Part 2: Nanoindentation creep and its relationship with uniaxial creep as a function of temperature. <i>Acta Materialia</i> , 2013, 61, 2471-2480.	7.9	57
41	The effects of irradiation on CrMnFeCoNi high-entropy alloy and its derivatives. <i>Progress in Materials Science</i> , 2022, 123, 100807.	32.8	56
42	Design of Scalable, Next-Generation Thick Electrodes: Opportunities and Challenges. <i>ACS Nano</i> , 2021, 15, 18624-18632.	14.6	54
43	3D-Printed High Dielectric Contrast Gradient Index Flat Lens for a Directive Antenna with Reduced Dimensions. <i>Advanced Materials Technologies</i> , 2016, 1, 1600072.	5.8	49
44	Spray processing of TiO ₂ nanoparticle/ionomer coatings on carbon nanotube scaffolds for solid-state supercapacitors. <i>Journal of Materials Chemistry A</i> , 2014, 2, 11022.	10.3	48
45	Phase Field Simulation of Binary Alloy Dendrite Growth Under Thermal- and Forced-Flow Fields: An Implementation of the Parallel-Multigrid Approach. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2013, 44, 924-937.	2.1	47
46	Scaleable ultra-thin and high power density graphene electrochemical capacitor electrodes manufactured by aqueous exfoliation and spray deposition. <i>Carbon</i> , 2013, 52, 337-346.	10.3	47
47	Spray forming of aluminium-copper alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1991, 134, 1111-1114.	5.6	45
48	An electrochemical study of repassivation of aluminium alloys with SEM examination of the pit interiors using resin replicas. <i>Corrosion Science</i> , 2008, 50, 3233-3240.	6.6	44
49	3D Printing of NiZn ferrite/ABS Magnetic Composites for Electromagnetic Devices. <i>Materials Research Society Symposia Proceedings</i> , 2015, 1788, 29-35.	0.1	44
50	Multiscale Engineered Si/SiO ₂ Nanocomposite Electrodes for Lithium-Ion Batteries Using Layer-by-Layer Spray Deposition. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 15624-15633.	8.0	44
51	Processing, microstructure and property aspects of a spraycast Al-Mg-Li-Zr alloy. <i>Acta Materialia</i> , 2007, 55, 1885-1894.	7.9	43
52	Droplet Splashing during Arc Spraying of Steel and the Effect on Deposit Microstructure. <i>Journal of Thermal Spray Technology</i> , 2000, 9, 250-258.	3.1	41
53	Pitting corrosion of spray formed Al-Li-Mg alloys. <i>Corrosion Science</i> , 2008, 50, 3221-3226.	6.6	41
54	Spray deposition of polymer nanocomposite films for dielectric applications. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2008, 151, 140-145.	3.5	40

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55	Colloidal synthesis of lead oxide nanocrystals for photovoltaics. <i>Chemical Communications</i> , 2010, 46, 2802.	4.1	39
56	Modelling the shape and thermal dynamics of Ni superalloy rings during spray forming Part 1: Shape modelling – Droplet deposition, splashing and redeposition. <i>Acta Materialia</i> , 2008, 56, 1588-1596.	7.9	38
57	Layer-by-layer spray deposition and unzipping of single-wall carbon nanotube-based thin film electrodes for electrochemical capacitors. <i>Carbon</i> , 2013, 61, 525-536.	10.3	38
58	A Solid-State Battery Cathode with a Polymer Composite Electrolyte and Low Tortuosity Microstructure by Directional Freezing and Polymerization. <i>Advanced Energy Materials</i> , 2021, 11, 2002387.	19.5	38
59	Low pressure plasma-sprayed Al ₂ O ₃ and Al ₂ O ₃ /SiC nanocomposite coatings from different feedstock powders. <i>Journal of the European Ceramic Society</i> , 2003, 23, 961-976.	5.7	37
60	Alternative Fabrication Routes toward Oxide-Dispersion-Strengthened Steels and Model Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 5313-5324.	2.2	37
61	Evolution of Fe Bearing Intermetallics During DC Casting and Homogenization of an Al-Mg-Si Al Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 3000-3014.	2.2	37
62	The monitoring of deposit surface temperatures during spray-forming by infrared thermal-imaging. <i>Scripta Metallurgica</i> , 1989, 23, 1651-1656.	1.2	36
63	Micro-scale graded electrodes for improved dynamic and cycling performance of Li-ion batteries. <i>Journal of Power Sources</i> , 2019, 413, 59-67.	7.8	36
64	Control of temperature profile for a spray deposition process. <i>IEEE Transactions on Control Systems Technology</i> , 2003, 11, 656-667.	5.2	35
65	An implicit parallel multigrid computing scheme to solve coupled thermal-solute phase-field equations for dendrite evolution. <i>Journal of Computational Physics</i> , 2012, 231, 1781-1796.	3.8	35
66	The structural changes of Y ₂ O ₃ in ferritic ODS alloys during milling. <i>Journal of Nuclear Materials</i> , 2014, 447, 242-247.	2.7	35
67	Phase field study of the tip operating state of a freely growing dendrite against convection using a novel parallel multigrid approach. <i>Journal of Computational Physics</i> , 2014, 257, 278-297.	3.8	35
68	Development of microstructure in spray formed alloys. <i>Progress in Materials Science</i> , 1997, 42, 373-392.	32.8	33
69	The equiaxed-banded microstructural transition during low pressure plasma spraying. <i>Acta Materialia</i> , 2004, 52, 199-208.	7.9	33
70	Modelling the shape and thermal dynamics of Ni superalloy rings during spray forming. Part 2: Thermal modelling – Heat flow and solidification. <i>Acta Materialia</i> , 2008, 56, 1597-1608.	7.9	33
71	Charge storage properties of a γ -MoO ₃ /carboxyl-functionalized single-walled carbon nanotube composite electrode in a Li ion electrolyte. <i>Electrochimica Acta</i> , 2013, 98, 294-302.	5.2	33
72	Spray printing of self-assembled porous structures for high power battery electrodes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 13133-13141.	10.3	33

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73	Manufacture of electrical and magnetic graded and anisotropic materials for novel manipulations of microwaves. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140353.	3.4	32
74	Spray printing and optimization of anodes and cathodes for high performance Li-Ion batteries. <i>Electrochimica Acta</i> , 2018, 292, 546-557.	5.2	32
75	In-situ X-ray radiography of primary Fe-rich intermetallic compound formation. <i>Acta Materialia</i> , 2020, 196, 759-769.	7.9	32
76	Modelling of droplet dynamic and thermal histories during spray forming. Analysis of spray solid fraction. <i>Acta Metallurgica Et Materialia</i> , 1995, 43, 913-921.	1.8	30
77	The effect of inhomogeneities in particle distribution on the dielectric properties of composite films. <i>Journal Physics D: Applied Physics</i> , 2006, 39, 1305-1311.	2.8	30
78	Engineering the Membrane/Electrode Interface To Improve the Performance of Solid-State Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 20756-20765.	8.0	30
79	Overcoming diffusion limitations in supercapacitors using layered electrodes. <i>Journal of Power Sources</i> , 2019, 433, 126579.	7.8	30
80	Layer-by-layer printing of multi-layered heterostructures using Li ₄ Ti ₅ O ₁₂ and Si for high power Li-ion storage. <i>Nano Energy</i> , 2019, 61, 96-103.	16.0	30
81	Two-dimensional simulation of liquid metal spray deposition onto a complex surface: II. Splashing and redeposition. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2001, 9, 111-127.	2.0	29
82	Multi-layered composite electrodes of high power Li ₄ Ti ₅ O ₁₂ and high capacity SnO ₂ for smart lithium ion storage. <i>Energy Storage Materials</i> , 2021, 38, 70-79.	18.0	29
83	A particle image velocimetry investigation of in-flight and deposition behaviour of steel droplets during electric arc sprayforming. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 383, 137-145.	5.6	28
84	Multiphysics modelling of the spray forming process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 477, 2-8.	5.6	28
85	Two-dimensional simulation of liquid metal spray deposition onto a complex surface. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1999, 7, 553-571.	2.0	27
86	Vacuum-Deposited Planar Heterojunction Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 11-15.	8.0	27
87	A Split Ring Resonator Dielectric Probe for Near-Field Dielectric Imaging. <i>Scientific Reports</i> , 2017, 7, 2038.	3.3	27
88	Co-spray printing of LiFePO ₄ and PEO-Li _{1.5} Al _{0.5} Ge _{1.5} (PO ₄) ₃ hybrid electrodes for all-solid-state Li-ion battery applications. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19094-19103.	10.3	25
89	Modelling of Spray Forming. <i>Cast Metals</i> , 1991, 4, 140-151.	0.4	24
90	Microstructural evaluation of monolithic and continuous fibre reinforced Al-12wt.%Si produced by low pressure plasma spraying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 265, 77-86.	5.6	24

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91	Microstructure of spray-formed Al alloy 2618. <i>Materials & Design</i> , 1993, 14, 45-47.	5.1	23
92	The microstructure of spray-formed Ti-6Al-4V/SiCf metal-matrix composites. <i>Journal of Microscopy</i> , 1993, 169, 263-267.	1.8	23
93	Microstructural evolution at Cu/Sn-Ag-Cu/Cu and Cu/Sn-Ag-Cu/Ni-Au ball grid array interfaces during thermal ageing. <i>Journal of Alloys and Compounds</i> , 2014, 613, 387-394.	5.5	23
94	Single-Step Spray Printing of Symmetric All-Organic Solid-State Batteries Based on Porous Textile Dye Electrodes. <i>Advanced Energy Materials</i> , 2019, 9, 1901418.	19.5	23
95	Characterisation of electric arc spray formed Ni superalloy IN718. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002, 326, 79-91.	5.6	22
96	Large arc voltage fluctuations and droplet formation in electric arc wire spraying. <i>Powder Metallurgy</i> , 2003, 46, 229-235.	1.7	22
97	An in situ powder neutron diffraction study of nano-precipitate formation during processing of oxide-dispersion-strengthened ferritic steels. <i>Journal of Alloys and Compounds</i> , 2014, 582, 769-773.	5.5	22
98	Toward Low-Cost Grid Scale Energy Storage: Supercapacitors Based on Up-Cycled Industrial Mill Scale Waste. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 2831-2838.	6.7	22
99	Combining composition graded positive and negative electrodes for higher performance Li-ion batteries. <i>Journal of Power Sources</i> , 2020, 448, 227376.	7.8	22
100	Interface topography and residual stress distributions in W coatings for fusion armour applications. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 477, 35-42.	5.6	21
101	An in-situ method to estimate the tip temperature and phase selection of secondary Fe-rich intermetallics using synchrotron X-ray radiography. <i>Scripta Materialia</i> , 2018, 149, 44-48.	5.2	21
102	The Role of Grain Refiner in the Nucleation of AlFeSi Intermetallic Phases During Solidification of a 6xxx Aluminum Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 5242-5252.	2.2	21
103	In-situ X-ray radiography of twinned crystal growth of primary Al ₁₃ Fe ₄ . <i>Scripta Materialia</i> , 2020, 184, 57-62.	5.2	21
104	The response of SiC fibres to vacuum plasma spraying and vacuum hot pressing during the fabrication of titanium matrix composites. <i>Journal of Microscopy</i> , 1999, 196, 162-174.	1.8	19
105	Spray-Printed and Self-Assembled Honeycomb Electrodes of Silicon-Decorated Carbon Nanofibers for Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 603-612.	8.0	19
106	A Computer Model for Trajectories and Thermal Profiles of Atomised Droplets in Spray Forming. <i>Cast Metals</i> , 1990, 3, 227-232.	0.4	18
107	Single-operation, multi-phase additive manufacture of electro-chemical double layer capacitor devices. <i>Additive Manufacturing</i> , 2019, 28, 344-353.	3.0	18
108	High energy lithium ion capacitors using hybrid cathodes comprising electrical double layer and intercalation host multi-layers. <i>Energy Storage Materials</i> , 2020, 33, 408-415.	18.0	18

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109	Interface microstructures in Ti-based composites using TiB ₂ /C-coated and uncoated SiCf after short-term thermal exposure. <i>Composites</i> , 1994, 25, 887-890.	0.7	17
110	Interface effects during consolidation in titanium alloy components locally reinforced with matrix-coated fibre composite. <i>Acta Materialia</i> , 2002, 50, 4981-4993.	7.9	17
111	Mapping of multi-elements during melting and solidification using synchrotron X-rays and pixel-based spectroscopy. <i>Scientific Reports</i> , 2015, 5, 15988.	3.3	17
112	Optimal Robot Path for Minimizing Thermal Variations in a Spray Deposition Process. <i>IEEE Transactions on Control Systems Technology</i> , 2007, 15, 1-11.	5.2	16
113	Real-time synchrotron x-ray observations of equiaxed solidification of aluminium alloys and implications for modelling. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015, 84, 012014.	0.6	16
114	Fe Bearing Intermetallic Phase Formation in a Wrought Al-Mg-Si Alloy. <i>Transactions of the Indian Institute of Metals</i> , 2012, 65, 553-557.	1.5	15
115	Microstructural comparison of effects of hafnium and titanium additions in spark-plasma-sintered Fe-based oxide-dispersion strengthened alloys. <i>Journal of Nuclear Materials</i> , 2017, 487, 433-442.	2.7	15
116	Infrared Thermal Imaging Measurement of Deposit Surface Temperatures During Spray Deposition. <i>Powder Metallurgy</i> , 1990, 33, 144-146.	1.7	14
117	Fibre re-arrangement and matrix softening phenomena in matrix-coated fibre (MCF) composites during vacuum hot pressing consolidation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 346, 246-253.	5.6	14
118	Preparation, microstructure and microwave dielectric properties of sprayed PFA/barium titanate composite films. <i>Composites Science and Technology</i> , 2016, 129, 198-204.	7.8	14
119	Scalable, Large-Area Printing of Pore-Array Electrodes for Ultrahigh Power Electrochemical Energy Storage. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 37859-37866.	8.0	14
120	<i>In situ</i> mapping of chemical segregation using synchrotron x-ray imaging. <i>MRS Bulletin</i> , 2020, 45, 934-942.	3.5	14
121	Evaluation of the Laguerre-Gaussian mode purity produced by three-dimensional-printed microwave spiral phase plates. <i>Royal Society Open Science</i> , 2020, 7, 200493.	2.4	14
122	Spray forming of Al/SiC metal matrix composites. <i>Journal of Microscopy</i> , 1995, 177, 337-346.	1.8	13
123	Freeform Fabrication of Ceramics by Hot-Melt Ink-Jet Printing. <i>Materials Research Society Symposia Proceedings</i> , 2000, 625, 195.	0.1	13
124	Modelling and experimental analysis of vacuum plasma spraying. Part I: prediction of initial plasma properties at plasma gun exit. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2000, 8, 497-513.	2.0	13
125	An electrochemical microactuator based on highly textured LiCoO ₂ . <i>Sensors and Actuators B: Chemical</i> , 2013, 176, 52-57.	7.8	13
126	An inverse problem in modelling liquid metal spraying. <i>Applied Mathematical Modelling</i> , 2003, 27, 379-396.	4.2	12

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127	Dynamic densification of metal matrix-coated fibre composites: modelling and processing. <i>Acta Materialia</i> , 2005, 53, 617-628.	7.9	12
128	Arc Sprayed Steel: Microstructure in Severe Substrate Features. <i>Journal of Thermal Spray Technology</i> , 2009, 18, 256-271.	3.1	12
129	Fabrication and Electrical Properties of Bulk Textured LiCoO ₂ . <i>Journal of the American Ceramic Society</i> , 2010, 93, 1856-1859.	3.8	12
130	Generalized Maxwell Fish-Eye Lens as a Beam Splitter: A Case Study in Realizing All-Dielectric Devices From Transformation Electromagnetics. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2017, 65, 4823-4835.	4.6	12
131	Direct Ink-Jet Deposition of Ceramic Green Bodies: I - Formulation of Build Materials. <i>Materials Research Society Symposia Proceedings</i> , 1998, 542, 141.	0.1	11
132	Phase transformations and control of residual stresses in thick spray-formed steel shells. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2004, 35, 1113-1122.	2.1	11
133	Spray Forming of Bulk Ultrafine-Grained Al-Fe-Cr-Ti. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2010, 41, 3208-3215.	2.2	11
134	NiZn ferrite/Fe hybrid epoxy-based composites: extending magnetic properties to high frequency. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 477-483.	2.3	11
135	Experimental evaluation of 3D printed spiral phase plates for enabling an orbital angular momentum multiplexed radio system. <i>Royal Society Open Science</i> , 2019, 6, 191419.	2.4	11
136	Manufacture of Hoop Reinforced Ti-MMC Rings by Spray/Wind Process. <i>Key Engineering Materials</i> , 1997, 127-131, 335-342.	0.4	10
137	Chemical interaction between sigma 1140+ SiC fibre and Ti-6Al-4V. <i>Scripta Materialia</i> , 2001, 44, 607-612.	5.2	10
138	Oxide formation in the Sprayform Tool Process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 383, 50-57.	5.6	10
139	Modelling and neutron diffraction characterization of the interfacial bonding of spray formed dissimilar steels. <i>Acta Materialia</i> , 2018, 155, 318-330.	7.9	10
140	Microstructural and mechanical characterisation of Fe-14Cr-0.22Hf alloy fabricated by spark plasma sintering. <i>Journal of Alloys and Compounds</i> , 2018, 762, 678-687.	5.5	10
141	Heat flow in spray-formed Al ₄ Cu. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1994, 179-180, 72-76.	5.6	9
142	Non-equilibrium Microstructure and Thermal Stability of Plasma-sprayed Al ₂ O ₃ /Si Coatings. <i>Journal of Materials Research</i> , 2005, 20, 2038-2045.	2.6	9
143	Heavily loaded ferrite-polymer composites to produce high refractive index materials at centimetre wavelengths. <i>APL Materials</i> , 2013, 1, .	5.1	9
144	Gap-Corrected Thin-Film Permittivity and Permeability Measurement With a Broadband Coaxial Line Technique. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2016, , 1-7.	4.6	9

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145	Design and characterisation of ex situ bulk MgB ₂ superconductors containing a nanoscale dispersion of artificial pinning centres. <i>Superconductor Science and Technology</i> , 2020, 33, 034006.	3.5	9
146	3D-printed $\lambda/4$ phase plate for broadband microwave applications. <i>Optics Express</i> , 2018, 26, 29068.	3.4	9
147	Modelling the Impedance Response of Graded LiFePO ₄ Cathodes for Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2022, 169, 010528.	2.9	9
148	Refinement of TiB ₂ in Al-Ti-B Grain Refiner Alloys by Ultrasound and the Effect on Al Grain Size. <i>Materials Science Forum</i> , 0, 654-656, 958-961.	0.3	8
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